

REMARKS

Claims 1-19 and 21-24 are currently pending in the application. Claims 1, 13, and 21 are amended to place them into allowable condition. The specification is amended to correct minor errors. The drawings are also amended to comply with the Examiner's request.

Applicants respectfully submit that entry of this amendment is proper because no new issues are raised that would require further search and/or consideration. The amendment presented herein addresses the Examiner's objections and places the application in condition for allowance. Therefore, entry of this amendment is respectfully requested. Reconsideration of the rejected claims in view of the above amendments and the following remarks is also respectfully requested.

Allowable Subject Matter

Applicants appreciate the indication that claims 20-24 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Independent claims 1, 13, and 21 now recite allowable subject matter. Specifically, claim 1 includes the allowable subject matter of claim 20. Claim 13 includes the allowable subject matter of claim 21. Allowable claim 21 is amended into independent format including the subject matter of claim 1 and any intervening claims. The remainder of the claims is allowable by virtue of their dependencies on these three allowable base claims. Accordingly, allowance of claims 1-19 and 21-24 is respectfully requested.

Objection to Drawings

The drawings were objected to due to lack of descriptive legends in the hollow rectangular boxes in Figures 4 and 5. Also, the Examiner indicates that Figures 1, 2, and 8 should be labeled to show individual elements.

Applicants have revised Figures 4 and 5 to include legends in the rectangular boxes. Applicants have also revised Figure 4 to change the reference numeral of the second conduit from "26" to "31". Reference numeral 26 now only represents the control unit of Figure 4.

As to the labeling of the Figures 1, 2 and 8, these Figures have been amended to include reference numerals that label individual elements. Applicants thus respectfully request withdrawal of the drawing objections of Figures 1, 2, 4, 5 and 8.

Specification

The specification has been amended in order to correct minor inconsistencies. For example, the reference to Figure 6 in paragraph 39 has been amended to reference Figure 8.

35 U.S.C. §103 Rejection

Claims 1-11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable U.S. Patent No. 5,584,701 to Lampotang in view of U.S. Patent 6,296,490 B1 to Bowden. This rejection is moot in view of the amendments described above.

Other Matters

At page 5 of the Office Action, the Examiner indicated that Applicant's response filed 04/30/2004 had failed to show how the components relied on by the Examiner do not teach the elements recited in claims 2 and 3, namely a pair of cylinders in parallel to the conduit (claim 2) or an actuator that includes a piston disposed in the reservoir (claim 3). The Examiner opined that Applicants' arguments merely made an assertion that Lampotang does not teach these features. Applicants respectfully traverse these comments.

As shown in Lampotang's Figure 1, and corresponding description at cols. 16, lines 24-68, it is shown that each of the mechanical bellows 100 (Lampotang's reservoir) are separate from and disposed outside the piston 112. In operation, pressure applied by Electronic Pressure Regulator 108 oscillates the piston 112 such that plate 120 is moved between its rest position to

position 120'. As the lung bellows 100 volume changes, the rack 116 moves with the top plate 120 and rotates a pinion (not shown) to operate a shaft encoder that displays the current volume of the lung bellows 100. Lampotang uses mechanical bellows with resilient sides, instead of a cylinder and piston as recited in claims 2 and 3, because a constant gas flow rate with variable composition, is provided to constantly flush the bellows 100 to simulate the pulmonary blood flow, which carries gases to and from the lungs (Col. 17, lines 20-23). Substituting a piston for the resilient sides of the bellows 100 would render the bellows inoperable, and would also hinder the constant gas flow rate. Consequently, the elements relied on by the Examiner do not teach the elements recited by claims 2 and 3.

Applicants previously argued that Lampotang fails to teach a pressure transducer in fluid communication with a reservoir and electrically coupled to a control unit *to measure pressure* (claim 10). In response to the Examiner's correct assertion that Lampotang discloses "once in the bellows 100, gas pressure may be constantly assayed using pressure sensors 101," Applicants withdraw their prior statement that Lampotang's pressure sensors 101 do not measure pressure. However, Applicants note that claim 10 remains allowable over Lampotang because it depends from allowable base claim 1, which recites features not taught or disclosed by Lampotang.

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CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 23-1951.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', with a horizontal line extending to the right.

Andrew M. Calderon
Registration No. 38,093

McGuireWoods, LLP
Suite 1800
1750 Tysons Blvd.
McLean, VA 22102
(703) 712-5426

DRAWINGS

In the Drawings:

Attached hereto are replacement drawings for Figures 1, 2, 4, 5, and 8, without any markings. The changes to the drawings are explained below, in the "REMARKS" section. All of the drawings on the replacement sheet, as originally filed, are provided herein. The header of each revised drawing sheet includes the following information: (i) "Replacement Sheet", (ii) application number and (iii) date information. These replacement drawings overcome the pending drawing objections, and thus place the application in better condition for allowance. Accordingly, they should be entered into the record.